

## Acupuncture in the U.S Armed Forces: A Brief History and Review of Current Educational Approaches

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### ABSTRACT

This article provides a brief overview of acupuncture education and training in the U.S. Armed Forces. It highlights some of the key educational challenges and approaches, and offers a vision for the future.

**Key Words:** Acupuncture, Education, Training, Military Medical Acupuncture

### INTRODUCTION

MILITARIES AROUND THE WORLD have long maintained varying degrees of interest in the use of acupuncture. One of the earliest citations that directly pertained to the U.S. military involves an October 1967 article<sup>1</sup> that appeared in the journal *Military Medicine*. The article was written by then Maj Norman Rich, MD (now a retired, but highly renowned Army surgeon), and Lt Col Francis Dimond, MD. These 2 Army physicians described their initial indoctrination into the use of acupuncture, which occurred while they were assigned to the Second Surgical Hospital in the Republic of Vietnam in 1965. Over recent years, a plethora of articles have appeared in both military and non-military publications, highlighting the contemporary relevance of this ancient medical art. Two examples are the September 2004 article in the *Navy Times*<sup>2</sup> entitled “On Pins and Needles—Acupuncture Helps Marines in Ramadi Deal with Stress,” and one that appeared in the July 2008 edition of *Military Medicine*,<sup>3</sup> highlighting the use of acupuncture in a deployed environment. An even more contemporary set of articles<sup>4,5</sup> noted that acupuncture can also be efficacious in managing symptoms associated with both post-traumatic stress disorder (PTSD) and traumatic brain injury (TBI).

### BACKGROUND

Over the past 10 years, a major transformation has taken place within U.S. military medicine regarding acupuncture and related techniques. Although sources<sup>6</sup> indicate that acupuncture has been used as an alternative treatment at the Walter Reed Army Medical Center since the 1980s, it was not until the mid-1990s that acupuncture truly gained a solid foothold in military medical practice. The fact that acupuncture is steadily achieving an increasingly prominent role in U.S. military medicine is directly attributable to the tireless efforts and innovative approaches that continue to be championed by Col (Ret) Richard C. Niemtzow, MD, PhD, MPH.

### DISCUSSION

So, how did this acupuncture renaissance begin? Well, like so many U.S.-trained physician-acupuncturists, Dr. Niemtzow is himself a graduate of the Helms Medical Institute (HMI; Berkeley, CA) “Medical Acupuncture for Physicians” program. Although he began his Air Force career as a radiation oncologist, he is credited with establishing the first military medical acupuncture clinic at the Walson Air Force Hospital in Fort Dix, NJ, in 1995.

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*\*The opinions and assertions contained herein are the private views of the author and are not to be construed as official or as reflecting the views of the United States Air Force Medical Corps, the Air Force at large, or the Department of Defense. The author indicates that she does not have any conflicts of interest.*

Report Documentation Page			Form Approved OMB No. 0704-0188		
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE <b>2011</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-2011 to 00-00-2011</b>	
4. TITLE AND SUBTITLE <b>Acupuncture in the U.S Armed Forces: A Brief History and Review of Current Educational Approaches</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>Uniformed Services University of the Health Sciences, Office of Curriculum Reform, 4301 Jones Bridge Road, Room D 3013-C, Bethesda, MD, 20814</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT <b>This article provides a brief overview of acupuncture education and training in the U.S. Armed Forces. It highlights some of the key educational challenges and approaches, and offers a vision for the future.</b>					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES <b>4</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			

This was, however, just the beginning, as military interest in acupuncture as an adjunct to conventional (Western) medicine really began to burgeon when Sue Bailey, DO, a former Assistant Secretary of Defense for Health Affairs, invited Dr. Niemtow to present a lecture on “The Role of Acupuncture in Breast Cancer: Magic or Medicine?” at a 1998 DoD Breast Cancer Conference. That presentation was so well-received that, shortly afterward, Dr. Niemtow was asked to serve as the Department of Defense’s (DoD’s) first full-time military medical acupuncturist, starting at the National Naval Medical Center in San Diego, CA, where he served from August 1999 through August 2002.

In August 2002 the Air Force Surgeon General approved the establishment of a full-time medical acupuncture clinic at Andrews Air Force Base, in MD. This heralded Dr. Niemtow’s return to the Air Force, and is where both he and his colleague Col (Ret) Stephen M. Burns, MD, continue to practice today.

Over the next few years, as the Andrews acupuncture clinic began to expand, interest in the efficacy of acupuncture for ameliorating complex pain syndromes—particularly those involving some of our nation’s most severely wounded warriors—caught the attention of the Air Force Surgeon General and Deputy Surgeon General. It was their combined desire to optimize the repertoire of pain-management techniques for these returning warriors that led to the 2009 decision to conduct a pilot program, training 44 active duty military physicians in medical acupuncture. These initial participants included members of the Air Force, Army, and Navy and represented a wide range of medical and surgical specialties.

The initial pilot program was a resounding success, and as this entire Journal issue will attest, succeeded in fulfilling its main objectives, namely, to evaluate the effectiveness of acupuncture for (1) reducing pain and (2) ameliorating reliance on narcotic analgesics in a military setting. The latter was especially significant as it could, in turn, (3) facilitate an earlier assessment of TBI in seriously injured combat casualties. Finally, the pilot program also sought to (4) evaluate the overall effectiveness and practicality of using acupuncture as a medical adjunct in a deployed environment. These successes led to a subsequent decision by the Navy’s Bureau of Medicine and Surgery, to offer this same model of training to a cadre of predominately Navy participants during 2009–2010.

### **Educational/Instructional Challenges**

Fulfilling these objectives was significantly facilitated by the U.S. Air Force’s initial partnership with the HMI, which developed and implemented a customized, operationally focused curriculum for this initial cadre of military medical physicians. As the curricular development proceeded, however, it became evident that there were some practical, military-unique considerations that needed to be addressed.

First was the challenge of overcoming some of the initial skepticism associated with introducing an ancient medical practice into a fast-paced, ultramodern, Western-oriented, military medical setting. That said, it did not take long before word of a continuous stream of clinical successes began to spread, especially cases involving patients with refractory pain syndromes. In many respects, this was directly attributed to the efficacy of Dr. Niemtow and his battlefield acupuncture (BFA) technique, which often led to the dramatic resolution of seemingly intractable pain—within minutes. As the saying goes, “seeing is believing,” and this aptly described the transformation of unabashed professional skepticism into a growing appreciation of just how effective acupuncture can be.

Training military physicians in the art of medical acupuncture had—and continues to have—some very practical challenges as well. Among these are (1) the reality that military physicians generally need to see patients at 10–20-minute intervals, which makes the routine incorporation of a full-fledged, traditional acupuncture history and physical examination—complete with tongue, pulse, and a 5-Phases assessment—virtually impossible to implement. Added to this is (2) the need for military medical acupuncturists to be able to function in a wide range of settings, ranging from the most austere of deployed locations, to fully equipped medical treatment facilities. The former requires cultivating a repertoire of treatment techniques that are highly effective, that minimize the need for full patient disrobing, and involve a limited reliance on highly portable pocket-sized equipment. All of these considerations are especially relevant when supporting active combat operations.

Yet another consideration is that (3) military physicians care for a highly diversified and rapidly mobile population, and that extensive follow-up visits are often not easy to arrange. While this, in itself, is not necessarily unique, what distinguishes many military members from their civilian counterparts is the need for military clinicians to deliberately evaluate the potential impact of an acupuncture treatment on a member’s operational readiness. There are, for example, specific guidelines regarding the type and timing of acupuncture interventions that can be provided to a military pilot prior to a flying mission. Similar restrictions apply to undersea divers and other service members who work in unique or atypical environments. Finally, (4) there is a genuine need to expand the military medical “toolbox” used to care for patients bearing the signature wounds of modern unconventional warfare—namely TBI, PTSD, and the complex pain syndromes associated with traumatic amputations and the accompanying phantom-limb pain.

### **Educational Approaches**

As previously noted, the HMI has been instrumental in facilitating the formalized training of military physicians in

the art of medical acupuncture. What has been particularly effective is an approach in which military participants completed their foundational acupuncture training in three evenly spaced segments. This was found to be especially efficacious, as it allowed military members to receive an incremental privileging letter at the end of each section. This, in turn, provided the documentation needed for members to secure progressively expanded medical acupuncture privileges at their assigned military treatment facility. A significant advantage of this approach is that it allows students to put their newly mastered skills into immediate clinical practice. As students progress, additional credentials are gained, so that, by the end of the 300-hour training program, participants are fully eligible for independent practice.

Tailoring acupuncture training to a military medical environment has contributed to the development and refinement of a variety of treatment approaches, several of which are discussed in greater detail elsewhere in this issue of the Journal. That said, three particular approaches have been shown to be especially effective in a military setting. These include the well-established BFA technique, the HMI auricular trauma protocol (ATP), and the locally known “Koffman Cocktail,” as refined by U.S. Navy Capt Robert L. Koffman, MD. The latter involves the placement of Seirin-type needles bilaterally at LI 4 and LR 3, with additional needles at GV 20 and GV 24.5. This deceptively simple intervention has been shown to be conducive to use in a wide range of operational environments and is particularly effective as a calming and centering treatment. Use of this therapeutic cocktail, along with the ATP and BFA techniques, provides further testament to the versatility of this ancient art.

In addition to providing formalized, foundational acupuncture education to military physicians via the 300-hour Continuing Medical Education program, another training approach currently offered within the Air Force Medical Service involves the use of exportable “mini-courses” focused on battlefield acupuncture. These short courses are typically conducted over a single 3–4 hour session, with an ideal faculty:student ratio of ~1:4. Instruction focuses on conveying an understanding of the neuroanatomical basis for the BFA technique and includes a period of highly structured and supervised clinical practice. Mastery of this approach has not only kindled a rapidly expanding interest in acupuncture overall, but, from a clinical–operational perspective, has provided a growing number of military physicians with a rapid and remarkably effective technique that can be used in practices ranging from flight medicine to psychiatry and physiatry, to internal and family medicine, and to orthopedics and occupational medicine, just to name a few.

Introducing acupuncture to practicing military clinicians is, however, just the “tip of the spear.” At the Uniformed Services University of the Health Sciences (USUHS), Be-

thesda, MD, the nation’s only military medical school, fourth-year medical students are being increasingly exposed to the role of acupuncture in modern military medical practice. In fact, interested students are encouraged to complete a fourth year elective in Complementary and Alternative Medicine at the Andrews Air Force Base clinic, where they are introduced further to the wide range of clinical conditions that can be amenable to treatment with medical acupuncture and a variety of related modalities.

### Future Directions

While there are still a number of challenges to overcome, an ideal vision for military medical acupuncture would involve a situation in which a growing number of medical students—particularly those who have committed to, and/or who might aspire to, military medical service, would graduate from medical school with a select “armamentarium” of basic acupuncture techniques. These could include, for example, demonstrated skills in BFA, ATP, and some fundamental surface-release and trigger-point techniques. As Joseph M. Helms, MD, noted, (personal communication, June 19, 2011) this collection of basic but versatile skills can be viewed as a form of “medical acupuncture first aid,” and can easily be mastered in a 3–4-day training period.

Looking into the future with an idealized perspective, one could also appreciate the value of cultivating and ultimately deploying multidisciplinary military medical teams whose members have been trained in several aspects of medical acupuncture. Over time, this could evolve into a situation in which appropriately selected patients could receive one level of acupuncture interventions from a trained medical technician or corpsman, with other levels of treatment being administered by a trained nurse–practitioner or physician assistant. This would allow physicians to concentrate on administering the more complex and advanced levels of acupuncture as dictated by the clinical situation and/or the operational environment.

### CONCLUSIONS

In summary, this article began by tracing some of the U.S. military’s initial exposure to the art of acupuncture and explored how, over the past 10–15 years, there has been a virtual transformation of this ancient art into a form that is conducive to modern military medical practice. Opportunities for future growth and evolution were also described, all of which should serve to ensure that acupuncture has a place in military medicine for years to come.

### DISCLOSURE STATEMENT

No competing financial conflicts exist.

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